Harvey Nelson

My name is Harvey Nelson. We're at our residence here in Bloomington, Minnesota. This is the fourteenth day of June 2002 and we're going to visit a bit about some of the old migratory bird programs and people in the days gone by.

I've got to stop and think where it all started here. When I came back out of World War II, I went back to the University of Minnesota and I, I started out to be a veterinarian originally and then I found out that Minnesota didn't have a vet school at that time so you had to finish up at Iowa State so after do that for a couple of years I decided I'd, I wanted to do something different and I had a long interest in fish and wildlife management which was you know, coming into the forefront at that time and they were beginning to give degrees in that and, and most all of the course work I had taken qualified for, for that program as well so I just shifted over and, and I stayed there at the University of Minnesota, did my, got my other graduate degree there in, must have been 40, 49 and I stayed on in graduate school for a year or more and at that time of course jobs were pretty hard to come by, fish and wildlife management was a program that was evolving at the state level after World War II. A lot of the original people in the programs had come back and you know, some went on back to school, others you know were in the jobs that they had so in the process my wife and I decided that it was time I went, went to work. So, I had applied for you know, work for the state of Minnesota where I had worked part time as a, as a graduate student over the years and then I'd, had applied for work with the Fish and Wildlife Service and low and behold in the, in the spring of 1950 I suddenly found myself offered a couple of different jobs with Minnesota D and R that was expanding right then but more importantly I got some offers from the Fish and Wildlife Service and because I was interested in, in the wetland programs I'd worked with in Minnesota at that time and migratory birds, waterfowl particularly, I'd kind of grown up in that atmosphere I decided that by golly, if I could get a job at the Fish and Wildlife Service that was what I was going to do and so I did. I went to work

with the Fish and Wildlife Service in, I think it was June of 1950 and started it in South Dakota where they were just beginning the first wetland program, the Wall Bay study area where Ken Black and Tom Evens had started that program and I was assigned to the Sand Lake Refuge, International Wildlife Refuges out at Columbia, South Dakota, just east of Aberdeen and my first assignments were on the Wall Bay study area program and the wetland program with Black and Evens and of course their, their years of work were published (inaudible) many years later and quite, you know quite a renowned piece of work but I had the privilege of working with those people and then from that point on I spent the next two years at the Sand Lake Refuge but also working in other parts of the migratory bird program and you know I've always considered myself fortunate that I had the opportunity to work with some of those old timers that were just putting the program together you know, guys like Art Hawkins had become the Mississippi flyway representative at that point, Jerry Stout that lived in Aberdeen was one of my first you know, study area bosses when I worked with him both in South Dakota and in Canada and oh, some of the old enforcement people like Everett Sutton was the game agent out of Aberdeen and had a lot of involvement in the early programs and then over the years even though I left there you know, many of the people came into that same arena guys like Milt Reeves, you were just talking about and a whole host of other folks that were early people in the program but again I was fortunate that I had an opportunity to you know, work with some of those people that, that set up some of the first you know, ground transects to measure breeding population and duck production initially in the Dakotas and then expanded into Canada and, and like guys like Jerry Stout that started the first, some of the first summer banding programs where we went out and you know, literally dry trapped the, the adults, the females and the young around the small ponds and so some of that early work was done there in the early 50's. So, that's how I sort of you know, got into the program and evolved into other kinds of job opportunities. After leaving the Dakotas I, I went to Saginaw, Michigan and set up Shy A Walsy National Wildlife Refuge in the Saginaw Valley, Judy and I lived there for three years putting that place on the

map. Then I came back and oh, I worked in the regional office here in Minneapolis at that time and spent a couple of tours of duty in training programs in Washington, DC and in that process I, of course I was always interested in research and had an opportunity to do further work in research while I was in Michigan I finished my Master's Degree at Michigan State University and then additional work on my PHD and I came back and one of those tours of duty I was in Washington I had an opportunity to go into research for about 10, 12 years and the first thing, the first assignment I had was to go back to North Dakota and set up the Northern Prairie Wildlife Research Center which we started in 1963 and then the buildings were completed in '65 and we staffed the program up in '65--

Well, based on what they learned in the wetland research program, the study areas and that type of thing, what they were learning from the new survey programs in the prairie pothole region of the US and Canada it became pretty obvious that there was just a lot of more specific information needing, needed on the breeding ecology of the prairie species and to tie that into the wetland communities and that was sort of the foundation for setting up the Northern Prairie Center, to begin to identify the, the relationships between breeding populations and the habitat requirements in the prairie region particularly and that was the mission that we started with. Then we also had to look at all the other factors that, that influenced the, the success of production, you know be it habitat, changing seasonal conditions, the draught periods, predation impacts, all of these things had a direct influence on the, the size of the annual waterfowl population of the prairie region of US and Canada. At the same time they set up a comparable research group the, the Canadian Wildlife Service set up a comparable group in Sasqutuen and that group is, you know expired too but the program is still there. So, anyway again, I was fortunate because I had an opportunity to, to start a new program and had an opportunity to hire just a lot of good people that were interested in that kind of work and over the years many of those people spent their career doing these things for the Service at Northern Prairie and other places and so it was an interesting assignment, probably one of

the most challenging I think I had my whole career and then while I was at Jamestown I also, I got back in school again, I served on the graduate faculty at North Dakota State University and continued to work on my graduate program which they eventually, they eventually gave me a Doctor of Science Degree from North Dakota State University for some of those efforts but anyway, at the same time of course, we, we still had this network of, of old timers so to speak that were, were still working in programs and helping to find the needs and so you know, through the years the, you talked about some of these folks today you know, the Art Hawkins and the Jerry Stouts of the world and Horton Jenson and Milt Reeves and John Rogers that came on the scene later in the Washington office that worked in the Manitoba Prairies on Scop early on and so it was kind of a different atmosphere for, unless you came up through the ranks and came through the programs you had a strong association with all these people and I think that's, that's what helped make those programs so you know, successful back in those days, didn't really have a lot of money to do these things. We were lucky to get money to hire people and building new facilities was a, you know, another challenge but eventually we got the support to do it and of course that program is still there, still very active. And then I left, I left Jamestown research program in, it must have been '74 or '75, went to Washington, Len Greenwald got me back in there. Len was the Director at the time and so I went in there and I spent several years as the Associate Director of the Service for the Fish and Wildlife Resources and again, that was another new challenge and again, during that period I had an opportunity to you know, to put employees, a lot of the other administrative structures and program structures that were needed to, to manage or provide some oversight for the whole field program in the whole migratory bird arena. At that time you know, Walt Crissey was a very prominent researcher and, and waterfowl manager at the, at Pautuxent around Laurel, Maryland. He and, and Al Guise and others did some renowned work and they're still around and very much interested in those things. So, out of all of that sort of emerged the, the establishment of the office of migratory bird management and for the last 20, 30 years that's involved into the main research and management group

dealing with migratory birds, particularly waterfowl on the North American continent.

Well, there had been a lot of changes in the Washington office in terms, and the Service as a whole as to how the organization was structured but, but back in those days they had, it was simpler I mean, you had one entity that was responsible for you know, Fish and Wildlife resources and another for, for enforcement and then of course the ole, river basins program, ecological services programs, see bald through on the other side of the picture an endangered species program came into being, all of those things you know, weren't there when I first went to work, when program needs you know sort of dictated that, that they would have to be established to carry out that responsibility. So, it was easier to do things I guess I would say but by the same token, there was a defined need both in US and Canada particularly that the migratory bird programs you know, needed to have better coordination, better cooperation and the other thing we did at about that time that carried over almost into present days was, we set up what we called a program review committee between the Fish and Wildlife Service and the Canadian Wildlife Service and John Rodgers headed the migratory bird group at that point and he and I sort of were the main US representatives and Jim Patterson and others from the Canadian Wildlife Service did the same thing on the Canadian side and that really lead to a you know, a major improvement in terms of coordination of programs both in the US and Canada, breeding grounds, migration areas, wintering programs all began to be tied together a lot better then they had been so I viewed that as, it was a real need at that point and obviously it existed and it was, was you know satisfied to a large degree and then of course out of that whole arrangement you know, came some other predictions and, and needs that were defined and one of those lead to the establishment or development of the North American Waterfowl Management Plan so, but then I left Washington in I think it was '74, '75 and I came back to the Twin cities as the regional director for, for the north central region at that time and I spent another seven years doing

that, during which time the whole concept of the North American Waterfowl Management Program came into focus and I worked you know, with our folks and various state people through the international association of Fish and Wildlife agencies with the Canadian counterparts and we began to put together the foundation for the North American plan. In, I think it was in 1986, '87, the plan was signed finally in '86 and because I'd worked with that so close in it's development and I was about ready to retire then, I'd, I'd spent all those years, 37 years I guess it was at that time but they, they asked me to stay another five years and, and implement the North American Waterfowl Management Plan. So, I agreed to do that, of course we started it, the implementation group out of the Minneapolis office because that's where I was and we did that for about a year and a half and kind of got things up and running and we got the joint venture concept put in place and I think we started out with the five initial joint ventures and had some grandiose plans but little by little it all fell in place and then it became obvious that the program was getting bigger and the funding base had to be established and you know, through Congressional support we got the North American Wetlands Conservation Act passed and that provided the first major US funding, you know direct funding, Federal funding for the plan matched by state money and in 1990 we moved the office back to Washington DC because we needed to be there by then. So, I went back and spent the last year and a half in, back in DC when we set up the office there in Arlington, Virginia where it still exists.

Well, there's no, you know, no question in my mind that there definitely just been a whole host of people that have been involved from say the early 50's, mid 50's right on through to, to, to today, different programs, a lot of changes. The biggest changes have been in the landscape and unfortunately that continues to be the major, the major problem but just looking back, see we went through some relatively high waterfowl population levels in the mid 50's, that's about the time the survey programs were coming into being and the, and the measurement techniques probably were certainly not as great as they are, as good as they are

today and they always need improvement so we don't quite know the magnitude of what existed back in the mid 50's but you know, based on the survey data and the hunting opportunity and the harvest surveys that were put in place at that time had to be some of the best years. Then, of course these things are cycling and particularly dealing with, with prairie ducks US and Canada, even more cyclic because of periodic draught. So, we went though, you know some periodic declines in, in habitat conditions in from a natural standpoint, both US and Canadian prairies and then we get some wet cycles and things would recover again but you know woven in all of this in both countries of course was a continual loss and degradation of wetland habitat and grassland habitat. So, while populations were you know, increasing on one had, the habitat quantity and quality was declining on the other. So, of course many other kinds of programs had been put in place to try to, to halt the decline or deterioration of habitat and early on it be, it was well recognized that it would be virtually impossible for any one or group of Federal agencies or state agencies singley or collectively to handle this habitat program in terms of all of the requirement, everything that needed to be done simply because there were not enough dollars and people to do that, implement that kind of a program. It became obvious that down the road, the future of wetlands and waterfowl really rested in terms of what happens on private lands and as a result there was a whole you know, new wave of programs and interest to try to dove tail wetland, grassland, waterfowl management, migratory bird management with private lands programs, with the Department of Agriculture's farm programs. It started with, way back with the, with the soil bank geese that's evolved into what we have today in terms of CRP and, and WRP, the, the water, wetland reserve program, the crop line reserve program and those have been really tremendous Federal programs that have provided you know, great opportunity to work with land owners to get them to preserve and protect and manage important wetlands and grasslands on private lands for in, for the incentives that they are provided through those programs you know, of course then to supplement that the states and the Service continue to expand their, their individual wetland programs you know, be it Minnesota’s has a

big, you know wetland protection program that they started back in the, in the late 50's and the Dakota's and others have had comparable things, to the different degrees and that of course serves as waterfowl production program, waterfowl production area program into being you know back in the, in the late 50's, early 60's and has continued to be another important cog in all of this. So, if you, you've had all these programs but you've also had these cyclic influences, return of draught conditions and increased hunting pressure, increased demand for hunting opportunity on the major species of waterfowl so while conditions have fluctuated the, the way I like to cast this is that in spite of all of this and there have been a lot of good programs put in place and a lot of you now conscientious people working with these programs that helped make them successful be it in Agriculture or Fish and Wildlife or Federal level, state level, whatever, whenever, every time we'd decline or lose some ground and get to the low point of the cycle, when we'd recover you'd never quite come back to where things were and that's been a continuing problem as I see it in all of these management programs and demand is still there, draught cycles will come and go but the problem is we're losing, continue to lose ground in terms of habitat on private lands and in Canada, the situation is even more complex because even though they've had some, some, some good prairie management programs at the Provincial level and Federal level they've never been able to implement or establish a major land use, land management programs and private lands comparable to like the CRP program in the US or the wetland reserve program in the US and they're still trying to do that. So, as a result even on the Canadian scene where there were even greater numbers of wetlands per, per square mile or whatever unit you want to use, things have declined equally and unfortunately probably has some more, more severe impact. So, we go though all these cycles and all these programs trying to maintain the best quantity and quality of what we have out there in terms of wetlands and grasslands in full production or shallow lakes or reservoirs for migration use or the same is true in the wintering areas. It's an insidious whittling away at that base. Now, we just went through a fairly good water period in the prairies and went back to fairly high levels of, of duck populations just during the

past two years, 2000, 2001 probably was you know, excited as a very good year. At the same time the draught picture started to come around the corner and now we're back looking at draught in the prairies and a decline in populations and that means more restrictive hunting regulations, declining duck populations particularly, don't want to get into geese, that's another, another situation but so for all these 50 years or more everybody that's been involved is, has been working in this sort of cyclic program and, and the natural swing of things comes and goes, all these other programs that have been put in place and there's some very good programs have been an attempt to, to prevent any further degradation or loss of habitat and it's been difficult and it will continue to be difficult and --

Well, back again after World War II and through the 40's into the 50's it was recognized back in those days that there needed to be a stronger united front presented by the hunting community and Ducks Unlimited of course, was one of the first groups organized in the US and in Canada and Mexico that took on this challenge to address the habitat protection issue through their members and fund raising opportunities that they had. This also transcended into organization at the state level like state waterfowl associations like here in Minnesota as I mentioned, you know, since I retired ten years, 11 years ago I do a lot of work with the Minnesota waterfowl association that's dedicated to you know, addressing this issue in the state of Minnesota, similar activities, similar organizations in many other states. Local sportsmen organizations you know, whatever their origins may be, have an opportunity to help you know, become involved in these programs and over the years there have been a lot of attempts to try to further unite the interest and support base of all of these hunting and fishing community interests, same thing is true even on the fishing side but it's a difficult task, the interest is there, the organization structure is there in most cases but when it comes down to developing a strong support base for national legislation that would dictate and determine what kind of programs are authorized and funded by Congress or what kind of programs are authorized and funded at the state level by state legislators the strength often isn't there and that's a, that's

a bugaboo that the fish and wildlife community and those areas of interest that have been faced since, ever since I've been around, have been so many different attempts to try to organize that and there have been a lot of successful attempts. I think we can look at the continuation of the, of the conservation phases of the farm program, since 1985, a lot of that never would have happened if there hadn't been an organized, strongly supported local effort state by state to make those things happen. Same is true at the state level, you know I spent a lot of time with different conservation organizations here in Minnesota and, and it's a constant struggle to get the state legislature to recognize the need of natural resource programs compared to all the other things that they need to fund to get some balance in the picture and keep that focus there for now and for the future. So, it's, it occurs at the state level, it occurs at the national level. It's important that the hunting community, the fishing community maintain their organizations that they can work through but they also need to be more active and be more participative in supporting their cause because the final analysis, those decisions are made by Congressional levels and at the state local interest, the state legislatures.

I guess, you know just to wind up what we were talking about earlier, you know, again I consider myself fortunate that I you know, came down the road through the Fish and Wildlife Service you know, with many opportunities and a lot of good programs, a lot of good people to help make all these things work and I was in positions where I had an opportunity to you know, have some influence on trying to move things in the right direction including the years how we revamped and reestablished with John Rogers the whole regulatory setting process, that's a story in itself.

But anyway, I think in over the years, as I was saying in spite of all of these good programs and, and struggles to get adequate fundings to support these programs and many good programs are still in place and doing great things the North American Waterfowl Management plan, classic example but in spite of that, you

know there's an increase to our public out there that are not fully aware of the, the perhaps the significance of the North American Migratory Bird program, how it originated, what's gone into it and what it means to a lot of people in the long terms, to a lot of agencies in the long term. There's also been a change in, in the interest of hunters, on one hand you know, over the years there, for a while we had a, sort or a gradual interest, increase in the overall number of hunters but then we reached a point that the segment of hunters that are waterfowl hunters or migratory bird hunters began to decline, probably replaced by hunter interest could be done easier at a local level, like more deer hunters, to balance it out but at the same time as the overall human population is increased in the whole North American continent there's been a stronger interest by non-hunters, people that consider themselves non-hunters, organized or not organized and over the years of course we've spent a lot of time you know, working with, talking with the anti-hunting groups if you want to cast them that way and that interest group continues to be there and it in many cases you know continues to maintain it's strength and, at least, I'm, I'm no longer directly involved in a lot of that but I see it still happening and in spite of the facts that you can lay on a table and support the, the cause if you will for migratory bird hunting there is just an element that, that's just opposed to that and you reach a point, you have to ask yourself how much effort is it really worth to continue to do this kind of a battle while the resources are going down the drain. If we could channel some of the effort into more positive things for the resource base then it seems to me we, we'd all be further along and then we'd be doing things more constructive. It's a tough, it's a tough issue. There's a lot of, a lot of different organizational effort at the state level particularly. It varies depending on what part of the geographic part of the US you're in but here in the Midwest and the prairie country a lot of that interest still centers around migratory birds and waterfowl particularly and there's a, there's a continual need to, to have some oversight in terms of what these organizations are doing and what their, what their plans are, what they tackle, what they challenge and I expect that will continue. I, when I was still in official capacity where I had to deal directly with these issues, my position was that you

gotta deal with the facts on the table and if you're honest with everybody and got the facts in front of you that's pretty hard to refute, that usually will survive in the face of personal opinion and a whole lot of organizational concepts.

Well, my sense is that that support basis is, is still there and the strength of it depends to a large degree upon the issues of the moment, what kind of involvement is being requested by the primary Congressional people and particularly those that are involved with the major committees that deal with natural resource programs including the Fish and Wildlife Service. You know, we never would have gotten the North American Wetlands Conservation Act passed if a few key Congressional people hadn't gotten behind it and said this needs to be done and, and we see that today in the farm program. Unfortunately, I think in this whole process there also have been other issues, other kinds of programs that have surfaced you know, like the endangered species program, a very necessary program in it's own right but it's also used at times to, in a different sense to refute you know, practical wildlife management and hunting. So, it needs to be a balance of these views and issues and how they're dealt with at the managerial level and I think that gets us in trouble at the Congressional level sometimes again, depending upon how these programs and these issues are reflected at the state level, at the local level, how they impact somebody, whether it's the kind of hunting season they are apt to have or, or can't have or some land restrictions, some private land management restriction that may result from some endangered species issues. So, Fish and Wildlife managers today have a difficult task and they really need to be up to date on all of these things to, to achieve this balance of opinion and support, that's the way I always try to approach it but it's tough to do.

When I first, well, when I was still in graduate school, late '40's and early '50's and when I first went to work for the Service, the waterfowl regulations setting process was, was apparently relatively simple in those days. Some of the key folks that knew a little bit about what was going on in duck production in the US

and Canada, mostly in the prairies or from some other key locations in the country, got together and put their information together and said by gosh, this is the way it looks and then they may have had a telephone call or two with counterparts in Canada or they may have had a meeting at the border and in one day's time sort of arrived at some conclusions, yes, I guess we can have these kinds of seasons and then they went back and, and put that into some kind of recommendation like Fish and Wildlife Service to the Director and to the Secretary of Interior and in the sort time there was a set of regulations. Well, it was much easier to do because they were, they were certainly at one stage you know, greater populations, more birds to deal with, hunting demand wasn't perhaps as great although there were a lot of hunters. It just hadn't become as institutionalized I guess you would say, at that point. Well, then it became obvious as they began to learn more about waterfowl populations, duck populations particularly from the Canadian, US breeding grounds surveys that were implemented you know, in the '50's and improved there on. They suddenly began to realize that there's a limit as to what the land can produce under given conditions and in some cases, I mean maybe we can't, if the populations are dropping a little bit because of draught we're going to have to have some comparable decrease in harvest to balance that population level and of course that's what lead to the, the more formal organization of the, what became the Office of Migratory Bird Management that Walt Crissey originally headed up and John Rogers you know, succeeded him and, and then of course that also brought in that whole new research element that provided a new base of information that presumably gave them a greater capability in making, fine tuning decisions both US and Canada and in, in a sense that's the way it worked, the program was good and I think the people that began to understand population dynamics based on new research suddenly began to realize that hey, there's some alarming things here and there's a limit to how much one can harvest or over, the possibility of over harvesting given populations of birds and that's still in the background today. Well, in that whole process the Office of Migratory Bird Management began to take on a greater prominence in the Fish and Wildlife

Service and became the focal point for waterfowl management by the Fish and Wildlife Service in, in combination through the states and the flyway councils and of course the flyway councils were, were established in the, well, in the mid to late ’50’s. I remember going to one of the first Mississippi flyway organizational meetings here in St. Paul back in, it must have been ’51, ’52 and these were common concerns you know, sometimes a little information you know, it wets your appetite and you need to do better. So, out of all of that you know, it became the, it was the origin of the flyway council system, the four flyway councils established in the US, the technical sections of the flyway councils to deal with the scientific information and the processes for bringing all this information together in a meaningful way to be recast in terms of annual regulations and there’s been a group of hard working people in that migratory bird office for many years as you well know and continue to be and the problems haven’t gone away. The process is there, I think the process they continue to improve from a scientific point of view. There are just so many things that are, that aren’t fully understood and just like right now, today there’s the concern that hey, the production in 2002 is not going to be so good and what do we do about that? Well, when they got into the adaptive harvest management strategy planning process and that provided another new vehicle for presumably helping do a better job of setting regulations (inaudible) crisis, what part of that set of strategies is applicable when you start to go down hill and we’ll see what happens in 2002.

Well, I was involved in, in a lot of the early discussions about the, you know the theories and principles you have adaptive harvest management and I think, you know I certainly support the concept. The theory I think is good and in practice if you can define populations levels to the degree that the concept requires then it seems to work but I'm not always certain that the population data you know, is, is adequate or sufficient to provide the precise degree of information that they apparently need to make it work and I think that's what they are facing now.

They're trying to, kind of reassess, the principles of the adaptive harvest management process but it's just one more tool.

Well, way back when the conservation movement you know, was started, I guess you can go back to the days of Theodore Roosevelt but even to Ding Darling when it came to migratory birds. One of the tenants of a lot of those early programs and thinkers was that we've got to get people involved. We're managing these programs and the resource for, in part for use by people. So, you know, whether it's musky fisherman or goose hunters or duck hunters, they need to be, get better organized so they can have a voice in the resource that they use in terms of it's management and of course the way to do that was to establish sportsman clubs in quotes, of one type or another to provide that type of local organization but then they discovered that while you may have these local organizations and a lot of these centered around private hunting clubs originally because that's where the, the core interest was or the core group of people that had the interest. So, it was sort of you know, a double edged approach and I think the, while conservation organization whatever their titles may have been you know whether, those that came under the umbrella of the National Wildlife Federation or later what evolved through DEU or what's evolved today at the state level in various states. The heart of that whole movement came largely through, through hunting clubs or organizations of groups affiliated with such mostly because they had the interest and a lot of them had to tie in and political base to work from to promote it and a lot of them had the money to do it so it took a combination of a lot of resources on that side to make things work. So, in the, in the migratory bird work and the waterfowl hunting aspect hunting clubs I think over the years you know, played a real strong role in, in how these programs evolved and then many times they had better access to political interests and influences then, and other elements at the state level for example. So, they played a strong role there and I think they played even a stronger role which is evident today where a lot of big private hunting clubs also protected and managed some quality habitat. So, they played an equal role in the whole

habitat protection and development and management aspect in, in certain parts of the country, stronger in some areas then others. Strong in the coastal areas, both Atlantic and Pacific as you know. It was fairly strong in the Great Lakes because of the big marshes that were going down the tube and some of the best ones that are made today are the ones that were private hunting clubs where they've been bought up and turned into National Wildlife Refuge or state management areas and that's usually history of many of these. So--

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a lot of conflicts as well but for the most part I think they played a positive role.

Well, I guess like I indicated in our discussion here today, I mean first of all, I keep saying that I was fortunate because I came into this kind of work, kind of a career at a time when there were just a lot of good people in the business, the old timers that learned the hard way, a lot of them. Our, you know, world renowned waterfowl people, wetland people even in today's world so an opportunity to work with those people, gain that experience was a you know, tremendous help for me. So, number one I had the opportunity to work with a lot of good people and I've used that approach and that principle in most everything I've done. I always looked for, if I had an opportunity to hire someone or to employ people I always tried to get the best qualified there was, in the long run it's paid off. Northern Prairie Research Center is a classic example, I think. North American Plains and others but not all the challenges that I had over the years, opportunities, I think the most challenging assignment I had was setting up the Northern Prairie Wildlife Research Center, getting that staffed up in short order and getting some research programs on line that began to address the problems that they, they wanted looked at and particularly to relate those to management needs, not necessarily a long term research view. So we had to, we had to establish a balance, short term, long term research program that began to address you know, current management issues and that’s still true

today. Probably, well no doubt and the second most challenging assignment was to help develop the North American Waterfowl Management Plan and then implement that effectively during the five year period that we allotted in cooperation with Canada and Mexico.

But I guess among other things, the position that I, of all the positions that I've had and opportunities and assignments in my whole career, almost 42 years one of the most interesting and I've said this in other interviews and what now too, and in press is being a Regional Director because a Regional Director in the Fish and Wildlife Service at least through my tenure had an opportunity to through good staff people and cooperation of the states and within our region to really influence important programs and an opportunity to get things done and I look back and wonder how many opportunities I might of missed but hopefully not a lot because we always kind of used that approach like now is the time to make things happen and I think that opportunity is still there and sometimes the regions you know, they're a little more autonomous then one would think but you still have the whole organizational structure of the Fish and Wildlife Service and having spent a lot of time in the Washington office as well as the regional office I can, I always felt I could, at least I had a chance at balancing the, the requirements in the administrative you know, authority to make things work. You know, I always think about is that you know, I retired in '92 so I've got 10 years of retirement behind me now and, and that's been interesting too but when anyone retires from any type of a job you know, it's difficult to keep up with the, with all the current activity and, and I don't look at the numbers as much as I used to in terms of waterfowl populations or the dollars or the acres or whatever is going on but I'm, I'm still concerned about everything moving in the right direction.

It's kind of interesting that you asked that because I've got to go give a presentation at a symposium here in Minneapolis next Friday that's going to talk about the or I'm going to talk about the future of wetlands and waterfowl management. But, in a nutshell you know, the future is, it poses some difficult

aspects, some difficult challenges. We talked about a lot of this already in terms of programs that need to be kept in place to, there's constant vigilance about maintaining habitat quality and quantity as well as the, the population levels of birds desired by not just the hunting public but the public at large that's interested in migratory birds so there's another big dimension here about, in terms of people that are interested in, in migratory bird resource or the wetland resource or the grassland resource because when you put all of this together, it's equally critical to other species, all kinds of ground nesting birds, other resident mammals, the whole host of you know, other wildlife species, fish species that come together in terms of a total habitat base. The difficulty in the future as I see it is going to be number one to keep or have adequate funding to support state and federal programs that are leading the way on these issues. Number two, we have to develop better ways, more incentives for private land owners to help be a part of this overall effort because they need some additional incentive to do the things we'd like to see them do and, and we're paying them reasonable amounts of money to certain ag programs or what, whatever today but that all, that changes depending upon the administration and the Federal Farm Program provisions and all that type of thing. We need to solidify that someway so that it isn't sort of a periodic program but we gotta find a better way to work with private land owners and provide incentives for them. Now, as far as the hunters of course just like fishermen have been one of the sole funding bases for many years for a lot of these programs and they've more then paid their way and they'll continue to do that I'm sure, the question is the numbers and the cost and the inflation and a whole lot of other things that are going on. So, we have to have a, a program or a system that maintains strong rapport with the participates whether it's duck hunters or deer hunters or fishermen or bird watcher or whatever. I think the, the non-wildlife groups that are users of non-wildlife species, bird watchers, people that band bats or people that like butterflies whatever, they'll all need to come closer together in this total picture because they're dependent upon the same landscape and a lot of them are starting to recognize that to a larger degree and I'm optimistic I think we'll see, we'll see that happen but not only from the stand

point of providing additional funding to increase the support base there but also to increase the political support base, state and Federal and the same certainly is true in Canada where they face even greater problems.